

Application No.: 09/613,952

Response to the Office Action mailed on: 21 October 2003

Response dated: (Monday) 22 March 2004

Amendments to the Claims

Please amend the claims as indicated in the following recitation of pending claims:

1. (Cancelled)

2. (Cancelled)

3. (Cancelled)

DI 4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

7. (Currently amended) ~~The assembly of claim 5~~ In a radio communication system having a network infrastructure for communicating data with a plurality of mobile stations, the data forming portions of communication signals transmitted at selected power levels, an improvement of an assembly for facilitating selection of the power levels at which mobile stations are to transmit the communication signals, said assembly comprising:

DI a signal generator coupled to the network infrastructure for generating, during selected intervals, a transmit power indication signal for broadcast transmission to the plurality of mobile stations, the transmit power indication signal indicating a maximum allowable power level at which each of the plurality of mobile stations are to transmit the communication signals, and for generating a power correction information signal for transmission to a selected at least one of the plurality of mobile stations, the power correction information signal for use by the mobile station in selecting a power level at which to transmit the communication signals

a mobile-station power-level calculator positioned at the selected at least one of the plurality of mobile stations, said mobile-station power-level calculator operable, responsive to the value of the transmit power indication signal and to the value of the power correction information signal, to calculate a power-level at which communication signals are to be transmitted by the selected at least one mobile station

wherein the radio communication system defines beacon intervals within which beacon signals are broadcast by the network infrastructure, and wherein the transmit power indication signal is generated for broadcast as part of at least one beacon signal;

wherein the radio communication system defines polling periods during which the network infrastructure polls a selected one of the plurality of mobile stations; and

wherein the power correction information signal is transmitted to the selected at least one of the mobile stations when the network infrastructure polls the selected at least one of the mobile stations.

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8. (Cancelled)

9. (Cancelled)

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10. (Cancelled)

11. (Cancelled)

12. (Currently amended) ~~The assembly of claim 11~~ In a radio communication system having a network infrastructure for communicating data with a plurality of mobile stations, the data forming portions of communication signals transmitted at selected power levels, an improvement of an assembly for facilitating selection of the power levels at which mobile stations are to transmit the communication signals, said assembly comprising:

a signal generator coupled to the network infrastructure for generating, during selected intervals, a transmit power indication signal for broadcast transmission to the plurality of mobile stations, the transmit power indication signal indicating a maximum allowable power level at which each of the plurality of mobile stations are to transmit the communication signals, wherein each of the plurality of mobile stations transmit communication signals at power levels substantially corresponding to the maximum allowable power level indicated by the value of the transmit power indication signal [(.)] :

wherein the radio communication system defines beacon intervals within which beacon signals are broadcast by the network infrastructure, and wherein the transmit power indication signal is generated for broadcast as part of at least one beacon signal; and

wherein the radio communication system defines a contention period including a plurality of sub-periods; and wherein the transmit power indication signal is generated during at least one of the plurality of definable sub-periods and broadcast to the plurality of mobile stations to control their transmission power during the contention period.

13. (Currently amended) The assembly of claim 9 12, wherein the transmit power indication signal is broadcast as a field within a beacon-frame body of the at least one beacon signal.

14. (Cancelled)

DI 15. (Currently amended) ~~The assembly of claim 14~~ In a radio communication system operable pursuant to a communication standard that defines a contention-free period and a contention period, the system having a network infrastructure for communicating data with a plurality of mobile stations, the data forming portions of communication signals transmitted at selected power levels, an improvement of an assembly for facilitating selection of the power levels at which mobile stations are to transmit the communication signals, said assembly comprising:

a signal generator coupled to the network infrastructure for generating, during selected intervals, a transmit power indication signal for broadcast transmission to the plurality of mobile stations, the transmit power indication signal indicating a maximum allowable power level at which each of the plurality of mobile stations are to transmit the communication signals;

wherein the transmit power indication signal is transmitted in a first manner during the contention-free period and in a second manner during the contention period, wherein the first manner by which the transmit power indication signal is transmitted comprises transmission to a selected one of the plurality of mobile stations [[.]] ; and

wherein the radio communication system defines beacon intervals within which beacon signals are broadcast by the network infrastructure, and wherein the transmit power indication signal is generated for broadcast as part of at least one beacon signal.

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Currently amended) ~~The method of claim 18 further comprising the additional operations of:~~ In a method for communicating in a multi-user radio communication system having a network infrastructure with which a plurality of mobile stations communicate data, the data transmitted at selected power levels, an improvement of a method for facilitating power-level selection, said method comprising:

generating, during selected intervals, a transmit power indication signal indicating a maximum allowable power level at which each of the plurality of mobile stations are to transmit the communication signals; and

broadcasting the transmit power indication signal, wherein the radio communication system defines beacon intervals within which beacon signals are broadcast by the network infrastructure, and wherein the transmit power indication signal is generated for broadcast as part of at least one beacon signal;

sending a power correction information signal to the selected one of the plurality of mobile stations; and

selecting an operating power level at which communication signals are transmitted by the selected one of the plurality of mobile stations responsive to values of the power correction information signal and of the transmit power indication signal [[.]] ;

wherein the radio communication system defines a contention-free period and further comprising the operation of transmitting the transmit power indication signal to a selected one of plurality of mobile stations, during the contention-free period.

20. (Currently amended) The method of claim ~~17~~ 19 wherein the radio communication system defines a contention period and wherein said operation of broadcasting comprises broadcasting the transmit power indication signal during the contention period.

21. (Currently amended) The method of claim ~~17~~ 19, wherein the transmit power indication signal broadcast as part of the at least one beacon signal is broadcast as a field within a beacon-frame body of the at least one beacon signal.

22. (Currently amended) In a radio communication system having a network infrastructure for wireless communication with a plurality of mobile stations, wherein the radio communication system defines a contention period and a contention-free period, an improvement of apparatus for power management, said apparatus comprising:

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a signal generator coupled to the network infrastructure, said signal generator for generating during respective selected intervals a transmit power indication signal and a power-correction information signal for transmission to at least a selected one of the plurality of mobile stations;

wherein the ~~transmit power indication signal~~ power-correction information signal has a value that varies as a function of whether the ~~signal is to be transmitted~~ power management occurs during a contention period or a contention-free period.

23. (Previously presented) The apparatus of claim 22, wherein the radio communication system defines beacon intervals within which beacon signals are broadcast by the network infrastructure and wherein the transmit power indication signal generated by said signal generator is broadcast as part of the beacon signals.

24. (Previously presented) The apparatus of claim 23, wherein the transmit power indication signal generated by said signal generator and broadcast as part of the beacon signals is transmitted as a field within a beacon-frame body of the beacon signals.

25. (Currently amended) In a radio communication system having a network infrastructure with which a plurality of mobile stations communicate data at selected power levels, the radio communication system defining beacon intervals within which beacon signals are broadcast by the network infrastructure, an improvement of an assembly for facilitating selection of the data-communication power levels, said assembly comprising:

DI a signal generator coupled to the network infrastructure, said signal generator for generating, during selected intervals, a transmit power indication signal for broadcast transmission to the plurality of mobile stations as part of the beacon signals, the transmit power indication signal having a value indicating a maximum-allowable power level at which the plurality of mobile stations are to transmit the data;

a mobile-station power-level calculator positioned at at least a selected one of the plurality of mobile stations, said mobile-station power-level calculator operable responsive to the value of the transmit power indication signal and to the value of ~~the~~ a power correction information signal to calculate a power-level at which communication signals are to be generated by the selected mobile station;

wherein the radio communication system further defines a contention-free period comprising a plurality of definable sub-periods, and wherein the transmit power indication signal generated by said signal generator is generated during at least one of the plurality of the definable sub-periods and transmitted to ~~a~~ the selected one of the plurality of mobile stations; and

wherein the radio communication system further defines polling periods during which the network infrastructure polls the selected one of the plurality of mobile stations and wherein the power correction information signal is transmitted to the selected one of the plurality of mobile stations when the network infrastructure polls the selected ~~one of the~~ mobile station.

26. (New) In a radio communication system having a network infrastructure with which a plurality of mobile stations communicate data at selected power levels, the radio communication system defining beacon intervals within which beacon signals are broadcast by the network infrastructure, an improvement of an assembly for facilitating selection of the data-communication power levels, said assembly comprising:

DI a signal generator coupled to the network infrastructure, said signal generator for generating, during selected intervals, a transmit power indication signal for broadcast transmission to the plurality of mobile stations as part of the beacon signals, the transmit power indication signal having a value indicating a maximum-allowable power level at which the plurality of mobile stations are to transmit the data;

wherein the radio communication system further defines a contention-free period comprising a plurality of definable sub-periods, and wherein the transmit power indication signal generated by said signal generator is generated during at least one of the plurality of the definable sub-periods and transmitted to a selected one of the plurality of mobile stations; and

wherein the radio communication system further defines polling periods during which the network infrastructure polls the selected one of the plurality of mobile stations and wherein a power correction information signal is transmitted to a selected one of the plurality of mobile stations when the network infrastructure polls the selected one of the plurality of mobile stations.
